DOCUMENT RESUME

ED 319 305 HE 023 494

TITLE	Tests on the Pathway to a Health Career.
INSTITUTION	Health Resources and Services Administration (DHHS/PHS), Rockville, MD. Bureau of Health Professions.
PUB DATE	89
NOTE	59p.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*College Entrance Examinations; Credentials; *Diagnostic Tests; *Disadvantaged; *Health Occupations; Higher Education; *Licensing Examinations (Professions); Test Anxiety; Test Wiseness
IDENTIFIERS	Health Careers Opportunity Program

ABSTRACT

The guide was developed by the Health Careers Opportunity Program, the principal Federal program focused on increasing the numbers of disadvantaged individuals who train for and enter the health professions. The guide is intended to help institutional grantees working with such students in the areas of: (1) diagnostic testing in cognitive and psychosocial processes, (2) diagnostic testing to determine student strengths and weaknesses in test-taking skills, (3) admission tests, and (4) credentialing tests. The publication summarizes 41 tests and is divided into three sections--diagnostic tests (10), admission tests (12), and credentialing examinations (19). For each test the following information is usually provided: purpose or use of the test; educational level or levels the test is appropriate for; a description of the areas assessed by the instrument; test format; time factors; type of scoring and how scores are used; dates of national examinations; and name, address, and telephone number of the source of the test. (DB)

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TESTS ON THE PATHWAY TO A HEALTH CAREER

Introduction

Background

The Health Careers Opportunity Program (HCOP) is the principal Federal program focused on increasing the numbers of disadvantaged individuals who are prepared to apply to health professions and allied health schools, to matriculate and to successfully complete this training. HCOP has a two-part mission--to insure equality of opportunity for students from backgrounds that have historically been underrepresented among the providers of health care and to increase the numbers of minority health care providers available to serve the segments of our population that tend to be medically underserved, especially by providers with similar ethnic and cultural backgrounds.

HCOP awards grants to educational institutions and other non-profit organizations to provide assistance to disadvantaged students interested in health careers. The students may be identified as early as the senior year in high school and assisted throughout their educational years to graduation from health professions school many years later. The HCOP projects must address two of the five legislative purposes--identification and recruitment; providing preliminary education and other enrichment services; facilitating the entry of the undergraduate students into the health or allied health programs; retaining the students in the professional level training; and publicizing the sources of financial aid needed to attend school.

HCOP grantees, working with students from disadvantaged backgrounds, will face many problems and issues. This publication deals with four of these areas of concern:

1. Diagnostic testing for student strengths and deficiencies in cognitive and psychosocial processes,

2. Diagnostic testing to determine student strengths and weaknesses in test-taking skills, including how to take tests and test anxiety, and

3. Admission tests.

4. Credentialing tests.

Diagnostic testing can be used to diagnose and define strengths and deficiencies in individual students. Standardized tests provide objectivity to the process of assessing a student's needs and individuals can be compared to "norms", a helpful tool in defining and redefining the individual's "disadvantage". A student who is disadvantaged in one skill or academic area will not be deficient in all areas addressed by the HCOP program; staff and student efforts can be directed more productively with some individualized

information. (As more support programs use some of these tests and report their findings, better definitions of norms can be developed for this population.)

Test taking skills are missing from the educational arsenals of most disadvantaged students. Their abilities should include the skills necessary to approach multiple choice tests, essay tests, standardized tests, and problem solving tests--different approaches for each type. Many HCOP students apply the same techniques (or none at all) to each type of test and anxieties may add further burdens that hinder the performance of the test taker.

Many HCOP projects are focused on the admission process for health professions schools; the tests and preparation for them are central to that milestone on the educational pathway.

Finally, it is important for the professionals who work with HCOP students all along the support continuum to understand what the student will be confronted with from the point of decision to enter a health career to the point of acceptance as a full-fledged practitioner. Credentialing examinations seem remote events to a high school senior, but are the key to the kingdom to someone at the end of an internship. Therefore, some information on these tests is included as a logical final section.

Purpose

The Division of Disadvantaged Assistance (DDA) manages the HCOP program. One of its responsibilities in conjunction with managing the program is to provide technical assistance to current and prospective grantees in all areas where such technical assistance could improve the projects and increase the likelihood that more disadvantaged students would successfully enter and complete the educational pathway to a health career.

This publication is a modest, initial attempt to identify some of the tests that students will encounter and some that grantees may find helpful in planning and implementing their projects. Insofar as possible, the accuracy of the information on each page has been checked by the source listed on that page. We are grateful to all of the people in the companies, organizations and associations who cooperated so willingly, and we take full responsibility for any mistakes that have crept in. We solicit comments, corrections and additions from you, our initial readers, to make a next edition of this publication as valuable as possible.

Contents

The publication is divided into three sections--diagnostic tests, admission tests, and credentialing examinations--with an introduction for each section. For each test summarized in this booklet, eight pieces of information have been sought:

-- the purpose or use of the test; how an HCOP program might use the test or why the student may encounter the test along a health career pathway;

-- what educational level or levels the test is appropriate for;

-- a description of the areas assessed by the instrument(s), whether it is mastery of subject matter, natural or acquired skills, attitudes or aptitudes;

-- the format of the test, e. g. essay, multiple choice, calculations;

-- how long the test is planned for and whether it is a timed test or a non-time limited exercise.

-- what type of scoring is done; whether it is scored locally or by the publisher of the test or both, and how the scores are used.

-- the dates of the examinations that are national in scope or whether the tests are administered at the convenience of the user;

-- the name, address and phone number of the source of the test.

Conclusion

We hope that this publication is helpful to HCOP grantees and HCOP students alike. Please send your comments and suggestions to:

Division of Disadvantaged Assistance
Dr. Clay E. Simpson, Jr., Director
Room 8A - 09 Parklawn Building
5600 Fishers Lane
Rockville, MD 20857

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DIAGNOSTIC TESTS

> "Taking examinations is a fact of life for all students. As early as grammar school and certainly by high school, students have been tested and retested in order to evaluate their performance in a variety of subjects and skills. Many students experience difficulty in performing well on examinations. For these students test taking is a highly anxiety producing and ego shattering experience. Minority and other culturally and educationally disadvantaged students, as a group, consistently have achieved somewhat lower scores on nationally administered multiple-choice examinations than have their more advantaged majority counterparts." *

Obviously, the output of knowledge on a test is only as good as the knowledge input that the student has. In many cases, the students may not have acquired skills that assist in the mastery of subject matter--taking good class notes and organizing these notes for further use and review; taking notes from textbooks; categorizing details into useful groupings for recall and use. The earlier that an HCOP program can infuse these learning skills into their programs, the better the student can perform all along the educational pathway. It may be helpful to provide amelioration just prior to the admission examination, but that is a bandaid. Prevention would be more appropriate and help the student's performance and self-image all along the way. Analysis and Application of Information by Miriam S. Willey and Barbara M. Jarecky is used by the Association of American Medical Colleges in workshops to train academic support staff. Materials to assist HCOP projects at the undergraduate level are available, but we have not included them because learning strategies are not an integral focus of this publication.

HCOP grantees must plan their programs in two phases. The first phase is long-range planning for a theoretical group of disadvantaged students with theoretical needs. The second phase is refining the program based on the actual needs of actual HCOP students.

In order to fine-tune their programs, HCOP grantees use a variety of diagnostic tests. Administering and evaluating tests can consume a great amount of the project's resources, so selection of the diagnostic tests to be used in an important decision. The program can usually call upon experts in the field on its own campus for guidance.

Basic references are The Mental Measurements Yearbook and Tests in Print III (1983) by the Buros Institute of Mental Measurements. The Mental Measurements Yearbooks consist of descriptive listings, references and

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* Barbara Jarecky in Medical Education: Responses to a Challenge; Chapter 9.

critical reviews of tests; therefore, tests included will be new or will have generated a large number of references since the last yearbook. Tests in Print consists of descriptive listings and references, without reviews, of commercially published tests that are in print and available for purchase. It serves as an index to all of the Yearbooks published to date.

The publishing companies whose tests are included in this section have catalogues listing the materials they have available and describing the educational level targeted, the purpose of the examination, whether it has been standardized and normed, and other technical information of great value to planners in HCOP programs. Do write to them if you have a special request. Their materials are revised quite often and new diagnostic tools developed to meet market demands.

In addition to the Test Anxiety Profile listed in the first section, The Rocky Mountain Behavioral Science Institute, has other screening diagnostic tools to measure test and math anxiety; to measure self-concept, and anxiety desensitization tapes.

One intriguing computer program that we saw as we were reviewing materials for this booklet is a computer software package from Consulting Psychologists Press entitled Coping with Tests. The program runs on the Apple II and the IBM PC families of computers and is available for individual students or in a counseling center version and offers four strategies to attack test anxieties. You will discover other innovative and exciting tools as you look into the possibilities.

The diagnostic tests described here were selected because a number of grantees have reported that they had found them useful-- mostly for programs with undergraduate students. However, HCOP programs in health professions schools that are designed to retain students at that level have also found diagnostic tests to be useful tools to assess a student's needs and to devise individualized strategies to help the student.

Again, we emphasize our desire for your comments, additions and corrections and your ideas to make this section of the booklet the best possible technical assistance document for HCOP grantees.

AMERICAN CHEMICAL SOCIETY DivCHED TESTING PROGRAM

1. **PURPOSE:** To test subject mastery in chemistry for diagnostic or placement purposes.

2. **LEVEL:** High school, college and graduate levels.

3. **AREAS TESTED:** A total of fifty separate tests are available for general, inorganic, organic, bio-, analytic, physical and polymer chemistries.

4. **TEST FORMAT:** Between 40 and 90 multiple choice items, depending on the test.

5. **TIME:** Between 1 and 2 hours, depending on the test.

6. **SCORING:** Answer sheets and scoring stencils available. All tests except those most recently developed are nationally normed.

7. **EXAMINATION DATE:** Tests are administered at the convenience of the user.

8. **SOURCE:**

American Chemical Society
DivCHED Examinations Institute
Oklahoma State University
107 Physical Sciences
Stillwater, Oklahoma 74078-0447
(405) 624-5947

COOPERATIVE MATHEMATICS TEST

1. **PURPOSE:** Measures achievement in major mathematical content areas ranging from arithmetic to calculus.

2. **LEVEL:** Grades 7 through 14.

3. **AREAS TESTED:** Multiple-item test assessing a student's comprehension of basic mathematical concepts, techniques and unifying principles. Subtests cover arithmetic, number system, algebra I and II, geometry I and II and algebra III, analytic geometry, and calculus I and II.

4. **TEST FORMAT:**

5. **TIME:** Timed tests. From 40 to 80 minutes, depending on the test.

6. **SCORING:** Nationally normed. Separate norms for college engineering, education and liberal arts students are available. Hand key. May be computer scored.

7. **EXAMINATION DATES:** At the convenience of the user.

8. **SOURCE:**

Educational Testing Service
Rosedale Road
Princeton, NJ 08541
(609) 921-9000

IOWA SILENT READING TEST

1. **PURPOSE:** To assess students' reading ability and comprehension. Grantees use Levels II and III to plan preliminary education and retention programs.

2. **LEVEL:** Grades 6 through college. Three levels of tests.

3. **AREAS TESTED:**

   a. Vocabulary
   b. Reading Comprehension
   c. Directed Reading (Levels I and II only)
   d. Reading Efficiency

4. **TEST FORMAT:** Multiple Choice

5. **TIME:** Level I (Grades 6 - 9) -- 1 hour, 31 minutes
   Level II (Grades 9 - 12) -- 1 hour, 26 minutes
   Level III (for academically accelerated high school students in grades 10-12 and for college students.) -- 56 minutes

6. **SCORING:** Nationally standardized. Hand scored.

7. **EXAMINATION DATE:** Test administered at the convenience of the user.

8. **SOURCE:**

   The Psychological Corporation
   555 Academic Court
   San Antonio, Texas 78204
   (512) 299-1061
   (800) 228-0752

IOWA TESTS OF EDUCATIONAL DEVELOPMENT*

1. **PURPOSE:** A high school achievement test battery to assess intellectual skills that are important in adult life and provide the basis for continued learning. May be useful to grantees planning preliminary education programs for freshmen and sophomore undergraduates.

2. **LEVEL:** Level I - Grades 9 and 10
Level II - Grades 11 and 12

3. **AREAS TESTED:** The battery consists of seven tests covering correctness and appropriateness of expression, ability to do quantitative thinking, analysis of social studies materials, analysis of natural science materials, ability to interpret literary materials, vocabulary, and use of sources of information.

4. **TEST FORMAT:**

5. **TIME:** Testing time is 4 hours and 10 minutes. Additional time needed to distribute and collect materials between tests.

6. **SCORING:** Scores are reported for each of the seven tests. A composite score is derived from the seven scores and a reading total score is also determined. Standard scores, national percentile ranks, local percentile ranks, stanines, and a number of special norms are available for all nine scores.

7. **EXAMINATION DATE:** Test administered at the convenience of the user.

8. **SOURCE:**

Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, Illinois 60631
(312) 693-0400

*"The College Basic Academic Skills Examination" will be available from the Riverside Publishing Company in January, 1989.

MYERS BRIGGS TYPE INDICATOR

1. **PURPOSE:** To assess individual personality dimensions.

2. **LEVEL:** High school and college.

3. **AREAS TESTED:** 1) extraversion - introversion; 2) sensing - intuition 3) thinking - feeling; 4) judgment - perception

4. **TEST FORMAT:** Forced choice - 126 items.

5. **TIME:** 25 to 35 minutes.

6. **SCORING:** Scores are reported for each of the above "areas tested" and a 4-letter type code is assigned (16 possible type codes). Easily hand-scored (3-5 minutes) or can be scored by a microcomputer with special software or at 3 scoring centers nationwide.

7. **EXAMINATION DATE:** Tests are administered at the convenience of the user.

8. **SOURCE:**

Consulting Psychologists Press
577 College Avenue
Palo Alto, California 94309
(415) 857-1444

NELSON - DENNY READING TEST

1. **PURPOSE:** To assess student achievement and progress in vocabulary, comprehension, and reading rate. Used by grantees to plan preliminary education and retention programs. Other forms of the test available for use as pretests and posttests.

2. **LEVEL:** Grades 9-16 and adult.

3. **AREAS TESTED:** Vocabulary development, reading comprehension, and reading rate

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Part I, the vocabulary test, is a 15-minute timed test. Part II, comprehension and rate, is a 20-minute test; first minute is reading rate. The adult version is somewhat shorter.

6. **SCORING:** Nationally standardized and normed. Norms available for grades 9-12; 2-year colleges; 4-year colleges and adults. Scoring services available.

7. **EXAMINATION DATES:** Test administered at the convenience of the user.

8. **SOURCE:**

Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, IL 60631
(312) 693-0040

STANFORD DIAGNOSTIC READING TEST

1. **PURPOSE:** To assess the strengths and weaknesses of students' reading ability. Grantees use the 4th level to plan preliminary education and retention programs.

2. **LEVEL:** Four levels:
   - Grades 1-2
   - Grades 3-4
   - Grades 5-8
   - Grades 9-13

3. **AREAS TESTED:**
   a. Decoding (phonetic analysis, structural analysis);
   b. Vocabulary (word meaning, word parts);
   c. Comprehension (literal and inferential); and
   d. Reading rate (fast reading, scanning and skimming).

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Timed tests. Times vary from 96 to 116 minutes, according to level.

6. **SCORING:** Nationally normed. Twelve scores reported -- one for each of the subtests under the four subjects and a total for each of the four.

7. **EXAMINATION DATE:** Tests are administered at the convenience of the user.

8. **SOURCE:**

The Psychological Corporation
555 Academic Court
San Antonio, Texas 78204
(512) 299-1061
(800) 228-0752

STRONG INTEREST INVENTORY

1. **PURPOSE:** To compare an individual's interests with the interests of individuals already in a variety of occupations.

2. **LEVEL:** Age 16 and above

3. **AREAS TESTED:** Six general occupational theme scales; 23 basic interest scales; 207 occupational scales (6 general occupational areas), 26 administrative indexes and 2 special scales(academic comfort and introversion/extraversion).

4. **TEST FORMAT:** 325 items with "like", "indifferent" or "dislike" responses.

5. **TIME:** 20 - 30 minutes.

6. **SCORING:** Scoring service available. Norms are differentiated by gender. Cannot be hand-scored, but can either be micro-computer scored on site with special software or mailed to one of three nationwide scoring centers.

7. **EXAMINATION DATE:** Tests are administered at the convenience of the user.

8. **SOURCE:**

Consulting Psychologists Press
577 College Avenue
Palo Alto, CA 94309
(415) 857-1444

This company has other interest inventory assessment instruments: e.g., Guilford-Zimmerman Interest Inventory, The Salience Inventory, Colorado Interest Indicator, and the Gough Medical Specialty Scales which students and interns can use as a guide when considering careers in ten medical specialties.

TEST ANXIETY PROFILE

1. **PURPOSE:** To identify the types of academic situations that produce anxiety in the student.

2. **LEVEL:** High School and College.

3. **AREAS TESTED:** Individual is assessed for test anxiety on (1) Multiple Choice Test (2) Time-Limit Test (3) "Pop" Quiz (4) Essay Test (5) Math Test and (6) Giving a Talk.

4. **TEST FORMAT:** Semantic Differential.

5. **TIME:** 20 Minutes.

6. **SCORING:** For each type of test, two scores are obtained: feelings of anxiety (the emotional response or fear aroused by the test) and thought interferences (the worries and confusing thoughts that interfere with performance). Hand key. Administered, scored, and profiled by the examiner.

7. **EXAMINATION DATE:** At the convenience of the user.

8. **SOURCE:**

Rocky Mountain Behavioral Institute, Inc.
2190 West Drake Road
Suite 144
Fort Collins, Colorado 80520
(303) 221-0602

WATSON-GLASER CRITICAL THINKING APPRAISAL

1. **PURPOSE:** To assess critical thinking abilities. Evaluation of gifted and talented individuals.

2. **LEVEL:** Grade 9 and above.

3. **AREAS TESTED:** Inference, recognition of assumptions, deduction, interpretation, evaluation of arguments.

4. **TEST FORMAT:** Multiple Choice

5. **TIME:** Untimed test; approximately 40 minutes.

6. **SCORING:** Hand key; may be machine scored locally. Norms have been established for high school and college students and for adults.

7. **EXAMINATION DATE:** Tests are administered at the convenience of the user. Examiner required.

8. **SOURCE:**

The Psychological Corporation
555 Academic Court
San Antonio, Texas 78204
(512) 299-1061
(800) 228-0752

ADMISSION TESTS

Performance on the battery of admission tests required by an institution of higher education can be the deciding factor in the pursuit of a professional career in the health field. Along the health career pathway, the critical tests begin in high school; preliminary college admissions tests may be given as early as junior high so that college bound students get exposure to the test and its environment. Universally, health professions schools use admission tests as a part of their entrance process. Some allied health disciplines require entrance exams. Therefore, HCOP programs at all levels will be interested in strengthening their students in some aspects of taking tests.

Admission tests may penalize the HCOP target population. Our students seldom come from a home or neighborhood environment where intellectual games are common pursuits. The elementary and secondary schools they attended may not have had honors tracks to challenge them and may not have encouraged them to gain experience by taking preliminary college entrance exams. No counselor will have worked with them early in high school to explain the different types of colleges, their entrance requirements and which tests to register for and how to prepare for the tests.

It would be wonderful if all students had learned study skills and good study habits and had developed both savvy and self-confidence about taking tests before they completed high school.* That utopia has not been reached by our HCOP students. Therefore, amelioration in these areas must be a basic concern of HCOP projects.

There are two very important thrusts for undergraduate HCOP programs to pursue. First, the program will work with the students to lower their anxiety about tests, to increase their competence in the subject areas to be tested, and to acquaint them with the form and substance of the admission tests they will take. Second, the college will establish strong linkages with the receiving health professions schools, working with them over the years, so their students are known by other attributes as well as by their test scores. The Office of Minority Affairs of the Association of American Medical Colleges conducts workshops for admissions, counseling and student orientation to help increase the acceptance and retention rates for minority students. No one action is sufficient; all avenues of assistance are worth exploring.

* HCOP projects with a high school component may be interested in the "College Admissions Practice Test for the Scholastic Aptitude Test" available from The Psychological Corporation --provides practice in authentic but unpressured situation plus immediate feedback.

Practice may not actually "make perfect " as the old adage says, but it enhances chances if the student has been exposed to the types of questions that will be presented on the admission examination. Practice on simulated exams may reduce test anxiety, a significant negative factor for many HCOP students. The simulated exams can also help pinpoint areas of student weakness for planning review courses.

There are a number of guides available, accompanied by sample tests for use by HCOP programs and student applicants. The Educational Testing Service sells both software and paper-copy materials to help students assess themselves in relation to graduate education and to prepare to take the GRE general test and many of the GRE subject tests. A preponderance of the practice tests are planned for the student who will be taking the MCAT. Because these exercises stress knowledge of the basic sciences and skills in reading, writing, and critical thinking, they are valuable to students planning to take other entrance exams. Several HCOP programs use practice exams as pre-tests and post-tests for self-evaluation of their program and to measure individual student progress. A few of the guides and practice tests for the MCAT are:

The MCAT Student Manual -- Association of American Medical Colleges

MCAT Medical College Admissions Test -- Arco Publishing Company, Inc.

A Complete Preparation for the MCAT -- Betz Publishing Company, Inc.
Volume I - Knowledge & Comprehension of Science: Biology, General Chemistry, Organic Chemistry, Physics.

Volume II - Skills Development for the MCAT: Science Problems Workout, Reading, MCAT Essay Writing. Quantitative Analysis, Review of High-Speed Math Techniques.

Student Guide to the MCAT -- Data Publishing Company

Computer MCAT Preparation -- Interactive Learning Systems, Inc.

Contemporary's MCAT -- Contemporary Books, Inc.

The New Medical College Admission Test -- Barnes & Noble Books

Barron's "How to Prepare for the New Medical College Admission Test" -- Barron's Educational Series, Inc.

The MCAT Primer -- Harcourt, Brace, Jovanovich Publishers

The MedREP Program, the HCOP program at Tulane University, has prepared materials for the MCAT preparation component of their program and is willing to share these materials with other HCOP grantees. In particular, they have published the MedREP MCAT Preparation Syllabus.

A few colleges and health professions schools have devised unique detours around the barriers of admission tests for applicants from disadvantaged backgrounds. For example, one school of public health has adopted an Alternate Entry System for some students to alleviate the stumbling block of the Graduate Record Examination (GRE) because they feel that the GRE does not necessarily predict success in their master's program. One or more medical schools have decided not to require the MCAT, but this is for reasons that have little to do with increasing the enrollment of the disadvantaged.

Admission tests are an inevitable event on the pathway to a health career. The more that HCOP programs can do to increase the probability that admission tests will be successful events for HCOP students, the larger the number of disadvantaged students who will advance along the educational pathway to becoming health care practitioners. This is the bottom line for HCOP projects.

ACT ASSESSMENT

1. **PURPOSE:** To evaluate a student's educational development in four subject areas. Required by more than 3,000 colleges.

2. **LEVEL:** High school juniors and seniors and other candidates for college entrance.

3. **AREAS TESTED:** English usage, social studies reading, mathematics usage and natural sciences reading.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Timed.

English Usage	40 minutes
Mathematics Usage	50 minutes
Social Science Reading	35 minutes
Natural Science Reading	35 minutes

6. **SCORING:** Nationally normed. Scored by ACT.

7. **EXAMINATION DATES:** February, April, June, October, December

8. **SOURCE:** The American College Testing Program (ACT)
2201 North Dodge Street, P.O. Box 168
Iowa City, Iowa 52243
(319) 337-1000

SCHOLASTIC APTITUDE TEST

1. **PURPOSE:** To measure a student's developed verbal and mathematical reasoning abilities to supplement the high school record in assessing readiness for college level work. The Test of Standard Written English (TSWE) and the Achievement Tests are also used by some colleges for course placements.

2. **LEVEL:** Predominately college-bound high school juniors and seniors. However, there are no age restrictions.

3. **AREAS TESTED:** Scholastic Aptitude Test(SAT) measures developed verbal and mathematical reasoning related to successful performance in college.

   TSWE measures ability to recognize and use standard English.

   Achievement Tests measure knowledge and the ability to apply that knowledge in specific subject areas.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** The SAT is a 2 1/2 hour test. The TSWE is 30 minutes. All achievement tests are one hour.

6. **SCORING:** Mathematics and verbal sections are scored separately. Scores range from 200 to 800 points for each section. Nationally normed. Cannot be scored locally.

7. **EXAMINATION DATES:** January, March, May, June, November and December.

8. **SOURCE:** College Entrance Examination Board
   Educational Testing Service
   Rosedale Road
   Princeton, NJ 08541-6004
   (609) 921-9000

MEDICAL COLLEGE ADMISSION TEST*

1. **PURPOSE:** To assess understanding of science concepts and principles identified as prerequisite to the study and practice of medicine.
To evaluate basic analytical skills in the context of medically relevant problems and data.
To help admissions committees predict which of their applicants will perform adequately in the medical school curriculum.

2. **LEVEL:** Third year undergraduate students and other individuals interested in applying for admission to a medical school.

3. **AREAS TESTED:** Knowledge of material covered in first-year, introductory undergraduate courses in general biology, general chemistry, organic chemistry, and general, noncalculus physics.

4. **TEST FORMAT:** Multiple choice; four separate test booklets.

5. **TIME:** Each of the four booklets is a timed test; total testing time is approximately 6 1/2 hours.

6. **SCORING:** Six scores are reported:
Biology Knowledge
Chemistry Knowledge
Physics Knowledge
Science Problems
Skills Analysis: Reading
Skills Analysis: Quantitative

Scores range from 1 to 15 for each part.

7. **EXAMINATION DATES:** April and September

8. **SOURCE:** Association of American Medical Colleges
One Dupont Circle, NW
Washington, DC 20036
202-828-0564

*This test is used by most schools of allopathic medicine, osteopathic medicine, podiatric medicine and some schools of veterinary medicine. Two medical schools do not require the MCAT.

OSTEOPATHIC MEDICINE

Schools of osteopathic medicine require prospective applicants to take the same examination as applicants to schools of allopathic medicine. See Medical School Admission Test.

For information on requirements for entry into a career in osteopathic medicine, contact:

American Association of Colleges of Osteopathic Medicine
Application Service
Suite 405
6110 Executive Boulevard
Rockville, MD 20852
(301) 468-0990

DENTAL ADMISSION TEST

1. **PURPOSE:** To evaluate academic background and motor abilities required for dental education and practice.

2. **LEVEL:** Third year undergraduate students and other persons interested in entering dental school.

3. **AREAS TESTED:** Quantitative reasoning ability, reading comprehension, perceptual ability, survey of natural sciences (biology, general chemistry, organic chemistry) and perceptual ability.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Each section is timed; overall time is more than 4 hours.

Quantitative Reasoning	45 minutes
Reading Comprehension	50 minutes
Survey of the Natural Sciences	90 minutes
Perceptual Ability Test	50 minutes

6. **SCORING:** Ability referenced scale; 1 to 30. Mean is 15/16.

7. **EXAMINATION DATES:** April and October.

8. **SOURCE:**
Division of Educational Measurements
American Dental Association
211 E. Chicago Avenue
Chicago, Illinois 60611
(312) 440-2689

VETERINARY APTITUDE TEST*

1. **PURPOSE:** To test academic achievement in areas necessary for the study of veterinary medicine.

2. **LEVEL:** Second or third year undergraduate students and others interested in entering a school of veterinary medicine.

3. **AREAS TESTED:** Verbal ability, quantitative ability, biology, and chemistry.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:** Nationally normed. Cannot be scored locally. Scaled scores (range 50 to 350) and percentiles reported for each section.

7. **EXAMINATION DATES:** January, May, October, November. The examination is not given at all test locations on all of these dates.

8. **SOURCE:** Association of American Veterinary Medical Colleges
Suite 834
1522 K Street, N.W.
Washington, D.C. 20005
(202) 659-2040

*Approximately one half of the schools of veterinary medicine use the Graduate Record Examination as their primary screening test for entrance. The remaining schools are about equally divided between use of the MCAT and the VAT as entrance exams. Some schools will accept scores from more than one of these tests.

OPTOMETRY ADMISSION TEST

1. **PURPOSE:** To measure general academic ability and comprehension of scientific information for admission to colleges of optometry.

2. **LEVEL:** A minimum of one year of college, which should have included courses in biology, physics, general and organic chemistry.

3. **AREAS TESTED:** Quantitative reasoning, reading comprehension, physics, and a survey of the natural sciences, (biology, general chemistry, organic chemistry).

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Overall time is one-half day.

6. **SCORING:** Standard scores based on the distribution of applicant performances on a range of 200 to 400 points.

7. **EXAMINATION DATES:** March and October.

8. **SOURCE:** Association of Schools and Colleges of Optometry
6110 Executive Blvd.
Suite 514
Rockville, MD 20852
(301) 231-5944

PODIATRY

Schools of podiatric medicine require prospective applicants to take the same examination as applicants to schools of allopathic medicine. See Medical School Admission Test.

For additional information, contact:

American Association of Colleges for Podiatric Medicine
Suite 204
6110 Executive Boulevard
Rockville, MD 20852
301-984-9350

PHARMACY COLLEGE ADMISSION TEST

1. **PURPOSE:** Assesses general levels of academic knowledge. One criterion for admission to most colleges of pharmacy.

2. **LEVEL:** Undergraduates with 1 or 2 years of college and pre-pharmacy requirements.

3. **AREAS TESTED:** Verbal ability, quantitative ability, biology, chemistry, physics, reading comprehension.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Each area timed separately. Total testing time is approximately 4 hours.

6. **SCORING:** Separate scores for each test section include percentile rank based on norm group. Cannot be scored locally.

7. **EXAMINATION DATES:** February, April, and November.

8. **SOURCE:**
The Psychological Corporation
555 Academic Court
San Antonio, TX 78204-0954
(512) 299-1061

For further information, contact:

American Association of Colleges of Pharmacy
1426 Prince Street
Alexandria, VA 22314
(703) 739-2330

GRADUATE RECORD EXAMINATION*

1. **PURPOSE:** To qualify for admission into graduate programs.

2. **LEVEL:** Baccalaureate degree or equivalent.

3. **AREAS TESTED:** Assesses verbal and quantitative ability in twenty advanced subject areas. Applicant must choose, depending on advanced degree desired.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Each form of the GRE consists of seven equal sections of 30 minutes each.

6. **SCORING:** Scores range from 200 to 800. Each graduate school sets its own acceptable score levels for entry.

7. **EXAMINATION DATES:** February, April, June, October and December. Two subjects are tested only once each year: French in October and Spanish in December.

8. **SOURCE:**
Graduate Record Examinations
Educational Testing Service
Rosedale Road
Princeton, New Jersey 08541
(609) 921-9000

For further information about graduate programs in public health, contact:

Association of Schools of Public Health
1015 15th Street, N.W.
Washington, D.C. 20005
(202) 842-4668

* In the health fields, the GRE is used by some graduate programs in audiology, hospital and health services administration, occupational therapy, pharmacy and pharmacology, physical therapy, public health, speech-language pathology, and veterinary medicine.

ALLIED HEALTH PROFESSIONS TEST

1. **PURPOSE:** To qualify for admission to advanced level allied health studies.

2. **LEVEL:** Second/third year undergraduate students.

3. **AREAS TESTED:** Quantitative ability, verbal ability, biology, chemistry, and reading comprehension.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:** Admitting schools set their own criteria for use of scores.

7. **EXAMINATION DATE:** Tests are scheduled at the convenience of the user.

8. **SOURCE:**

The Psychological Corporation
555 Academic Court
San Antonio, Texas 78204
(512) 299-1061

DENTAL HYGIENE CANDIDATE ADMISSION TEST

1. **PURPOSE:** To test academic achievement in areas necessary for the study of dental hygiene.

2. **LEVEL:** College sophomores and others interested in studying dental hygiene.

3. **AREAS TESTED:** Verbal ability, science, spatial relations, quantitative ability, and reading comprehension.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:** Nationally normed. Cannot be scored locally. Scaled scores (range 50 to 350) and percentiles reported for each section.

7. **EXAMINATION DATES:** February, April, June and December.

8. **SOURCE:**
The Psychological Corporation
555 Academic Court
San Antonio, TX 78204-0954
(512) 299-1061
(512) 270-0396

For additional information, contact:

American Dental Hygienists' Association
444 North Michigan Avenue, Suite 3400
Chicago, IL 60611
(312) 440-8930

CREDENTIALING

After the student has successfully passed each academic and clinical milestone on the pathway to a career in the health fields, there will usually be one final hurdle -- credentialing.

Governmental bodies and private agencies have recognized that health care providers diagnose and treat a broad range of physical and emotional problems, using many concepts and technologies and that the consumer of these services may not be able to know whether the service is appropriate, whether it was properly performed and, sometimes, will not even know whether the service produced the desired outcome. Therefore, the States have developed regulations to govern the practice of the healing arts within their borders; this regulating and credentialing will vary from State to State.

There are three general levels of credentialing for entry into practice:

REGISTRATION requires a person to file with some designated government agency before practicing an occupation. In some cases, the State will have established minimum education standards which must be met before the person can register.

CERTIFICATION is a form of regulation whereby the State grants title recognition to persons meeting predetermined standards. Non-certified people may perform the occupation's services, but only certified persons may use the designated title. Certification is usually accomplished by passing an examination developed by the national organization of practitioners in the particular field.

LICENSURE is the most restrictive form of State credentialing. Licensure means that it is illegal for a person to practice the profession without first meeting the standards to be credentialed imposed by the State. The licensure process usually begins with an examination developed by a voluntary association of professionals in the field and probably includes a practical or clinical component. Entry is further supervised by an appointed State licensure Board and fees will be charged.

A recent report by the Council of State Governments summarized the detailed studies they have done in the area of state regulations governing health care practitioners. This summary indicates the prevalence of certification and licensure examinations that students will face near the completion of their educational preparation.

NUMBER OF STATES REQUIRING LICENSURE OR CERTIFICATION*

December 31, 1985

Profession	Licensure	Certification
Acupuncturist	14	2
Audiologist/Speech Pathologist	36	
Chiropractor	52	
Dental Assistant	4	
Dental Hygienist	51	1
Dentist	52	
Denturist	3	2
Dietician	8	5
Emergency Medical Tech	51	
Hearing Aid Dealer/Fitter	46	
Medical Laboratory Tech	4	
Nuclear Medicine Tech	7	
Nursing Home Administrator	52	
Occupational Therapist	38	
Optician	22	1
Optometrist	52	
Pharmacist	52	
Pharmacy Assistant	1	
Physical Therapist	50	
Physician (MD, DO)	52	
Physician Assistant	2	29
Podiatrist	52	
Radiation Therapy Tech	12	
Radiologic Tech	16	1
Respiratory Therapist	10	5
Veterinarian	52	
Veterinarian Assistant	41	

*Including the District of Columbia and Puerto Rico.

More examinations are coming. Several forces are at work in the legislatures which will increase state activities in regulating health occupations--increased public demand for assurance of practitioner competence and practitioner interest in professional recognition. New technologies require highly skilled individuals to administer them, and certification or licensure seems to be indicated. Respiratory therapy is such an occupation. Fifteen States now regulate respiratory therapists. Twelve of these states passed regulatory acts in 1985 or 1986. Six states require respiratory therapists to be licensed and nine states require certification. It is estimated that at least 100 health occupation groups are now regulated or are seeking regulation in at least one state.

In addition, many of the health professions are emphasizing the need to monitor the continuing competency of professionals once they are practicing in the field. How is this being done? Requirements are being added for continuing education for the practicing health professional and MORE TESTS AND EXAMINATIONS WILL BE ADDED, TOO!!!

Current information about the requirements for certification and licensure for a specific occupation in your State can be obtained from

National Clearinghouse on Licensure, Enforcement
and Regulation (CLEAR)
P.O. Box 11910
Ironworks Pike
Lexington, KY 40578

FEDERATION LICENSING EXAMINATION (FLEX)

1. **PURPOSE:** States require the FLEX exam as a part of the licensure process.

2. **ELIGIBILITY:** Set by each State. Graduation from medical school. Some graduate training usually required.

3. **AREAS TESTED:** Basic and clinical science principles.

4. **TEST FORMAT:** Multiple choice questions and patient management problems.

5. **TIME:** Two components, one and one-half days each.

6. **SCORING:** Passing requirements on each component are established by the individual licensing boards.

7. **EXAMINATION DATES:** June and December.

8. **SOURCE OF TEST:**

The Federation of State Medical Boards
2630 West Freeway
Suite 138
Fort Worth, Texas 76102
(817) 335-1141

NATIONAL BOARD OF MEDICAL EXAMINERS (NBME) PARTS I, II & III

1. **PURPOSE:** Certification examination used for licensure.*

2. **ELIGIBILITY:** Different for each part. Also requirements for the tests vary from medical school to medical school.**

3. **AREAS TESTED:**
   Part I: Basic Medical Sciences
   Part II: Clinical Science
   Part III: Clinical Competence

4. **TEST FORMAT:** Multiple choice for Parts I & II.
   Part III is multiple choice and patient management problems.

5. **TIME:**
   Part I - 2 days
   Part II - 2 days
   Part III - one day

6. **SCORING:** Scored by the NBME. States may set levels for acceptable performance.

7. **EXAMINATION DATES:**
   Part I - June and September
   Part II - April and September
   Part III - March and May

8. **SOURCE:**
   National Board of Medical Examiners
   3930 Chestnut Street
   Philadelphia, Pennsylvania 19104
   (215) 349-6400

* The NBME exams are used as alternatives to FLEX for licensure by 3/4 of U.S. medical graduates.

** Part I -- completion of two years of medical school.
Part II after 3 or 4 years of medical school.
Part III after receipt of M.D. degree. Usually while in residency or other postgraduate training.
Many medical schools require taking (and passing) Part I before advancing to the clinical phase of medical education. Part II may be required by the medical school for graduation.

NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

1. **PURPOSE:** One component of the licensing process and part of the qualifying exams to become a diplomate of the National Board of Osteopathic Medical Examiners

2. **ELIGIBILITY:** Part I and Part II: must be an advanced student in an accredited osteopathic college.
Part III: must have graduated from an American Osteopathic Association (AOA) approved osteopathic college, been in an AOA accredited internship for at least six months, and have completed Parts I and II of the NBOME exam.

3. **AREAS TESTED:** Basic medical sciences (Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Microbiology, and Osteopathic Principles); Clinical Sciences (Surgery, Obstetrics-Gynecology, Preventive Medicine and Public Health, Pediatrics, Psychiatry, Internal Medicine, Medical Jurisprudence and Osteopathic Principles).

4. **TEST FORMAT:** Multiple choice.

5. **TIME:**

Part I:	2 days
Part II:	2 days
Part III:	1 1/2 days

6. **SCORING:**

7. **EXAMINATION DATES:**

Part I:	June and October
Part II:	March and October
Part III:	February and June

8. **SOURCE:**

National Board of Osteopathic Medical Examiners
2700 River Road
Suite 407
Des Plaines, IL 60018
(312) 635-9955

NATIONAL BOARD DENTAL EXAMINATIONS

1. **PURPOSE:** Licensure to practice dentistry.

2. **ELIGIBILITY:** Part I after sophomore year and Part II during or after senior year in dental school.

3. **AREAS TESTED:**

   Part I: Anatomic science, biochemistry, physiology, microbiology, pathology and dental anatomy.

   Part II: Operative dentistry, pharmacology, prosthodontics, oral surgery, pain control, orthodontics, pedodontics, oral pathology, dental radiology, endodontics and periodontics.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Part I - One day; Part II - Two days.

6. **SCORING:** Norm referenced scoring. 85 mean score; 75 minimum passing.

7. **EXAMINATION DATE(S):**
   July -- Part I
   April -- Part II
   December -- Part I & Part II

8. **SOURCE:**

   Joint Commission on National Dental Examinations
   American Dental Association
   211 East Chicago Avenue
   Chicago, Illinois 60611
   (312) 440-2678

VETERINARY MEDICAL LICENSE EXAMINATION *
NATIONAL BOARD EXAMINATION
CLINICAL COMPETENCY TEST

1. **PURPOSE:** Used by about 3/4 of the States to examine practitioners of Veterinary Medicine for licensure in the State.

2. **ELIGIBILITY:** Graduation from a recognized school of veterinary medicine.

3. **AREAS TESTED:** Basic Science, Medicine and Surgery based on established Veterinary Practices.

4. **TEST FORMAT:** National Board Examination - 400 multiple choice; Clinical Competency Test - 14 problem solving cases .

5. **TIME:** NBE - 6 to 8 hours; CCT - 4 hours; Total 1 1/2 days.

6. **SCORING:**

7. **EXAMINATION DATES:** Second Tuesday and Wednesday in May and December

8. **SOURCE:** American Veterinary Medical Association
National Board Examination Committee
930 North Meacham Road
Schaumburg, IL 60196
(312) 885-8070

*About 3/4 of the States use the NBE in their licensure process for veterinarians; the other States have their own processes that are designed and approved by their State licensure Boards. The CCT is used by about 1/2 of the States in addition to the NBE; still other States add a practical component.

NATIONAL BOARD OF EXAMINATION IN OPTOMETRY

1. **PURPOSE:** To assist State Boards to determine candidates' entry level competence for the safe practice of optometry.

2. **ELIGIBILITY:** Second half of the second year in a recognized college of optometry.

3. **AREAS TESTED:** Basic science and clinical science. Patient care is being added.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** 8 hours for each section.

6. **SCORING:**

7. **EXAMINATION DATES:** April and August.

8. **SOURCE:**

The National Board of Examiners of Optometry
5530 Wisconsin Avenue, NW
Suite 805
Washington, DC 20815
(202) 652-5192

NATIONAL BOARD OF PODIATRIC MEDICAL EXAMINERS - PARTS I & II

1. **PURPOSE:** Part of the requirements for professional licensure; to assure the public that prospective providers meet minimum competency standards before being granted licensure by the States.

2. **ELIGIBILITY:** Full time second year student (Part I) or fourth year student (Part II). Graduates of accredited colleges may take or retake Parts I & II in any sequence.*

3. **AREAS TESTED:** Part I: General anatomy, lower extremity anatomy, biochemistry, medical microbiology, pathology, pharmacology and physiology;

   Part II: Community health/jurisprudence,dermatology, medicine, orthopedics/biomechanics, podiatric medicine, radiology, surgery, anesthesia, and hospital protocol.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Testing time for both Parts I & II is about 7 hours and 20 minutes. Tests administered in 3 sessions over 1 1/2 days.

6. **SCORING:** Criterion referenced scoring

7. **EXAMINATION DATES:**
   Part I -- July
   Part II -- March

8. **SOURCE:**

   National Board of Podiatric Medical Examiners
   c/o Educational Testing Service
   CN 6515
   Princeton, NJ 08541-6516
   (609) 921-9000

* Of the seven schools of podiatric medicine, two schools do not require students to take either Part I or Part II; two schools require students to take and pass Part I only; three schools require students to take Part I and Part II, but passing is not a requirement for graduation.

NATIONAL ASSOCIATION OF BOARDS OF PHARMACY LICENSURE EXAMINATION (NABPLEX)

1. **PURPOSE:** Professional licensure.

2. **ELIGIBILITY:** Final term or graduation from an accredited college of pharmacy.

3. **AREAS TESTED:** Interpreting and dispensing prescriptions/medication orders; assessing prescriptions/medication orders and the drugs used in dispensing them; compounding and calculation involved in the extemporaneous preparation of prescriptions/medication orders; monitoring drug therapy; and counseling patients and health professionals.

4. **TEST FORMAT:** 350 total questions administered in two parts.

5. **TIME:** 8 hours.

6. **SCORING:**

7. **EXAMINATION DATES:** January, June and September.

8. **SOURCE:**

National Association of Boards of Pharmacy
O'Hare Corporate Center
1300 Higgins Road, Suite 103
Park Ridge, Illinois 60068
(312) 698-6227

NTE AUDIOLOGY TEST*

NTE SPEECH-LANGUAGE PATHOLOGY TEST

1. **PURPOSE:** One of the several requirements for the Certificate of Competence issued by ASLHA. Used by some States as part of the licensure procedure.

2. **ELIGIBILITY:** Master's degree in the subject for which certification or licensure is desired.

3. **AREAS TESTED:** Audiology Test--basic science, development/pathology of the auditory system, patient evaluation, audiology/aural rehabilitation, and speech and language development and disorders.

   Speech-Language Pathology Test--basic science; anatomy and physiology of the speech/hearing mechanisms; normal development; evaluation and intervention; etiology, behavioural characteristics and types of disorders; rehabilitation.

4. **TEST FORMAT:** Multiple choice.--150 items.

5. **TIME:** 2-hour timed test.

6. **SCORING:** Scored by the Educational Testing Service.

7. **EXAMINATION DATES:** March, July and November.

8. **SOURCE:** American Speech-Language-Hearing Association
   10801 Rockville Pike
   Rockville, MD 20852
   (301) 897-5700

*These are specialty area tests, developed by the Educational Testing Service. Students interested in the core battery of tests or other specialty area tests may write to National Teachers Examination Program, Educational Testing Service, CN 6051, Princeton, NJ 08541-6051. Request the NTE BULLETIN OF INFORMATION.

NATIONAL REGISTRY EXAMINATIONS FOR CARDIOVASCULAR TECHNOLOGY

1. **PURPOSE:** Professional registry or certification.

2. **ELIGIBILITY:** Must be either:
(1) graduate from high school and 2 years work experience;
(2) have a degree in science related area or equivalent in health science;
(3) have A.S. or B.S. degree from accredited school in cardiovascular technology;
(4) have a baccalaureate degree and 6 months of work experience in any area.

3. **AREAS TESTED:** Basic sciences related to cardiovascular technology and specific knowledge and skills related to the specialty area:.
--invasive cardiology
--non-invasive cardiology
--peripheral vascular cardiology

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Three hours.

6. **SCORING:** 70% of the total number of questions (150 - 175)

7. **EXAMINATION DATES:** Tests are given on Saturdays in March, April, May and September, depending on which specialty registry or certification is desired.

8. **SOURCE:** Cardiovascular Credentialing International
& National Board of Cardiovascular Testing, Inc.
2801 Far Hills Avenue
Suite 309
Dayton, Ohio 45419
(513) 293-0315

General Clinical Dental Assisting
Dental Practice Management Assiting
Oral & Maxillofacial Surgery Assisting
Orthodontic Assisting

DENTAL ASSISTING NATIONAL BOARD EXAMINATIONS

1. **PURPOSE:** Certification and renewal in four specialties of dental assisting.

2. **ELIGIBILITY:** Each specialty has its own eligibility pathways to the examination. High school graduation or equivalent and CPR certification and work experience are general prerequisites.

3. **AREAS TESTED:** Governed by certification desired. Dental materials and procedures; record-keeping; prevention and patient education, sedation and office management.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** One day.

6. **SCORING:**

7. **EXAMINATION DATES:** February, June, August, November. All test sites give the exams in November, but not all in the other months.

8. **SOURCE:**

Dental Assisting National Board, Inc.
216 E. Ontario Street
Chicago, Illinois 60611
(312) 642-3368

NATIONAL BOARD DENTAL HYGIENE EXAMINATION

1. **PURPOSE:** Professional registry or certification.

2. **ELIGIBILITY:** Graduation from an accredited dental hygiene educational program (or late in second year).

3. **AREAS TESTED:** Anatomic sciences, physiology, biochemistry and nutrition, microbiology and immunology, pathology, pharmacology, assessing patient characteristics, obtaining and interpreting radiographs, planning and managing dental hygiene care, performing periondontal procedures, utilizing preventive agents, providing supportive treatment, community health activities.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** One day

6. **SCORING:** Norm-referenced, 85 mean score, 75 minimum passing.

7. **EXAMINATION DATES:** April, July, December.

8. **SOURCE:**

Joint Commission on National Dental Examinations
211 E. Chicago Avenue
Chicago, Illinois 60611
(312) 440-2678

NATIONAL REGISTRATION EXAMINATION FOR DIETITIANS

1. **PURPOSE:** Professional Certification.

2. **ELIGIBILITY:** Must have completed a program approved by American Dietetic Association before application is issued for examination. Certifications are awarded at B.S., M.S and Ph.D. degree levels.

3. **AREAS TESTED:** Normal nutrition, clinical nutrition, community nutrition, management, food service and food science.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 5 hours.

6. **SCORING:**

7. **EXAMINATION DATES:** April and October.

8. **SOURCE:**

The American Dietetic Association
Suite 1100
208 S. LaSalle Street
Chicago, Illinois 60604-1003
(312) 899-4859

CERTIFYING EXAMINATIONS:

Medical Laboratory Technician	Technologist in Chemistry
Medical Technologist	Specialist in Chemistry
Cytotechnologist	Technologist in Hematology
Specialist in Cytotechnology	Specialist in Hematology
Histologic Technician	Technologist in Immunology
Histotechnologist	Specialist in Immunology
Technologist in Blood Banking	Technologist in Microbiology
Specialist in Blood Banking	Specialist in Microbiology

1. **PURPOSE:** To measure the knowledge, skills and abilities required to practice in one of the 16 fields certified.

2. **ELIGIBILITY:** High school or undergraduate degree, depending on the category of certification sought.

3. **AREAS TESTED:** Skills related to performing laboratory tests with pathologists and other physicians or scientists who specialize in clinical chemistry, clinical microbiology clinical immunohematology and other biological sciences.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:**

7. **EXAMINATION DATES:** Third Friday; February and August.

8. **SOURCE:**

American Society of Clinical Pathologists
Board of Registry
P.O. Box 12270
Chicago, Illinois 60612
(312) 738-1336

Certifying Examinations:

Supervisor	Director
Specialist in Cytogenetics	Specialist in Hematology
Scientist	Technician
Phlebotomist	

Categorical CLS Examinations:

Microbiology	Clinical Chemistry
Hematology	Immunohematology

1. **PURPOSE:** To measure the knowledge, skills and abilities required to enter the practice of medical technology.

2. **ELIGIBILITY:** Five routes available for entrance to this examination: two routes directly from educational programs; two combine educational requirements and 2 or 4 years of work experience; the fifth is Canadian certification plus work experience.

3. **AREAS TESTED:** Skills relative to performing laboratory tests with pathologists and other physicians or scientists who specialize in clinical chemistry, clinical microbiology clinical immunohematology, clinical hematology, laboratory practice.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:** Scaled Scoring; Range 300-600; passing always at 450.

7. **EXAMINATION DATES:** Fourth Saturday; January and July.

8. **SOURCE:**

National Certification Agency for
Medical Laboratory Personnel
1101 Connecticut Avenue, NW, Suite 700,
Washington, DC 20036
(202) 857-1130

AMERICAN OCCUPATIONAL THERAPY CERTIFICATION BOARD
CERTIFYING EXAMINATION FOR OTR

1. **PURPOSE:** To assess the knowledge, skills, and abilities that are required to practice as an occupational therapist or as a registered or certified occupational therapy assistant.

2. **ELIGIBILITY:** Students who have completed academic requirements and field work in an accredited or approved occupational therapy program.

3. **AREAS TESTED:** Independent living skills; sensorimotor components; cognitive components; psychosocial components; program support. Different examinations for therapists and for therapy assistants.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 4 hours.

6. **SCORING:** Test results are determined by a passing score of 450 out of a possible 600 (scale score).

7. **EXAMINATION DATES:** Fourth Saturday; January and July.

8. **SOURCE:**

American Occupational Therapy Certification Board
1383 Piccard Drive #300
Rockville, Maryland 20850
(301) 948-9626

PHYSICAL THERAPY LICENSING EXAMINATION

1. **PURPOSE:** To evaluate candidates for professional licensure in physical therapy to insure the public welfare.

2. **ELIGIBILITY:** Graduate of an accredited school of physical therapy or its equivalent.

3. **TESTED:** Basic sciences, clinical sciences, theory, procedures, and physical therapy treatment.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 7 hours.

6. **SCORING:** Examinations are scored by the professional testing services. Scores are reported to state licensure boards who then determine the pass rate for each administration of the examination.

7. **EXAMINATION DATES:** February, July, and November

8. **SOURCE:**

American Physical Therapy Association
1111 North Fairfax Street
Alexandria, VA 22314
(703) 684-2782

PHYSICIAN ASSISTANT NATIONAL CERTIFYING EXAMINATION

1. **PURPOSE:** To assess the competence of physician assistants to conducting a variety of health care functions normally encountered in practice.

2. **ELIGIBILITY:** Graduation (or expected completion) from a physician assistant or surgeon assistant program accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of AMA.

3. **TESTED:** Patient screening and examination, clinical procedures, laboratory analyses, emergency management and treatment, patient counselling and other areas that physician assistants should be skilled at performing.

4. **TEST FORMAT:** General exam is three sections--one multiple choice section, one patient management problem section and a practical exam in clinical skills problems. Primary care and surgery specialty exams are multiple choice.

5. **TIME:** One and one-half days.

6. **SCORING:** This is a norm-referenced examination.

7. **EXAMINATION DATE:** October

8. **SOURCE:**

National Commission on Certification of Physician Assistants
2845 Henderson Mill Road, N.E.
Atlanta, Georgia 30341
(404) 493-9100

CERTIFYING EXAMINATIONS: Nuclear Medicine Technologist
Radiographer
Radiation Therapy Technologist

1. **PURPOSE:** To measure the knowledge, skills, and abilities required to enter practice in the radiation fields.

2. **ELIGIBILITY:** Graduate of a program approved by the Committee of Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA).

3. **AREAS TESTED:** Depending upon which certification is desired, radiation protection, equipment operation and maintenance, image production and evaluation, radiographic procedures, and patient care & management.

4. **TEST FORMAT:** Multiple choice.

5. **TIME:** Approximately 3 hours.

6. **SCORING:**

7. **EXAMINATION DATES:** Third Thursday; March, July, October.

8. **SOURCE:**

American Registry of Radiologic Technologists
2600 Wayzata Boulevard
Minneapolis, Minnesota 55405
(612) 377-8416

CERTIFYING EXAMINATIONS: Certified Respiratory Therapy Technician
Registered Respiratory Therapist
Certified Pulmonary Technologist
Advanced Certified Pulmonary Technologist

1. **PURPOSE:** Certification and registry for careers in pulmonary technology and respiratory therapy.

2. **ELIGIBILITY:** Graduation from an AMA-accredited program in respiratory therapy or an NSCPT-approved pulmonary technology program. College credits plus experience can be substituted.

3. **AREAS TESTED:** Application and analysis of clinical data; equipment and instrumentation; diagnostic and therapeutic procedures.

4. **TEST FORMAT:** 200 questions; multiple choice

5. **TIME:**

6. **SCORING:** Minimum pass level set prior to exam. Score of 75 on a 1-99 scale needed to pass.

7. **EXAMINATION DATES:** March, July and November.

8. **SOURCE:**

National Board for Respiratory Care
11015 West 75th Terrace
Shawnee Mission, Kansas 66214
(912) 268-4050

REGISTRY EXAMINATION
FOR DIAGNOSTIC MEDICAL SONOGRAPHERS (ULTRASOUND)

1. **PURPOSE:** To assess skills and knowledge necessary to the practice of sonography or non-invasive vascular technology for those who wish to earn registry credentials by examination.

2. **ELIGIBILITY:** Completion of at least one year of ultrasound training in an accredited school, or 2) complete an undergraduate degree in ultrasound, or 3) two years of college plus two years of ultrasound training or experience, or 4) forty eight months of clinical patient experience with 24 months on-the-job training in ultrasound.

3. **AREAS TESTED:** Ultra-sound physics, specialty (obstetrics and gynecology, abdomen, neurosonology, ophthalmology, adult echocardiography, pediatric echocardiography), and vascular physics (vascular technology).

4. **TEST FORMAT:** Multiple Choice.

5. **TIME:** 2 hours for the physics examinations and 3 hours for the specialty examinations.

6. **SCORING:** Passing is determined as 70% of 200 questions correctly answered on the specialty examination and 70% of the 120 questions correctly answered on the physics examination.

7. **EXAMINATION DATE:** October

8. **SOURCE:**

American Registry of Diagnostic Medical Sonographers
32 East Hollister Street
Cincinnati, Ohio 45219
(513) 721-6662

*U.S. Government Printing Office : 1989 - 241-256/00404

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HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Bureau of Health Professions